

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Katharina W. Schuster on May 20, 2008.

The application has been amended as follows:

1. (Currently Amended) A computer-implemented method of determining a spot price for a commodity on a spot market, comprising:

generating market states using historical data, wherein the historical data includes transactional data and non-transactional data, wherein the transactional data includes prices and quantities of the commodity and date sold in past transactions, wherein the non-transactional data includes non-transactional information or conditions that affect the spot price or demand of the commodity, wherein the market states include market state attributes, and wherein the market state attributes include product- or service-based data, customer-based data, competitor-based data, seasonal variations, and special events;

calculating a forecast of the market states for a next pricing period, wherein the forecast includes a forecast price for the commodity on the spot market during the next pricing period;

generating a clustering index for each of the past transactions and each of the forecasted market states;

comparing clustering indices of the past transactions and the forecasted market states for the next pricing period; and

generating a price-demand curve for the commodity on the spot market for the next pricing period using records from the past transactions having clustering indices that are the same or comparable to the cluster index of the forecasted market states for the next pricing period.

2. (Currently amended) The computer-implemented method of claim 1, wherein the forecast of the markets states for a next pricing period comprises at least one of a maximum price for the commodity, a minimum price for the commodity, a company's price rank, or the nearest higher price of the commodity.

3. (Cancelled).

4. (Currently amended) The computer-implemented method of claim 1, wherein generating is performed without using data from any other cluster.

5. (Cancelled).

6. (Currently amended) The computer-implemented method of claim 1, further comprising determining the spot price for the commodity on the spot market for the next pricing period using the price-demand curve.

7. (Currently amended) The computer-implemented method of claim 6, wherein determining the spot price for the commodity on the spot market comprises determining the spot price consistent with maximizing profit, volume, and revenue.

8. (Currently amended) The computer-implemented method of claim 1, wherein the commodity is a product.

9. (Currently amended) The computer-implemented method of claim 1, wherein the commodity is a service.

10. (Currently amended) A computer readable medium having code embodied therein, which when executed causes a computer to perform the steps comprising:

an instruction for generating market states using historical data, wherein the historical data includes transactional data and non-transactional data, wherein the transactional data includes prices and quantities of the commodity and date sold in past transactions, wherein the non-transactional data includes non-transactional information or conditions that affect the spot price or demand of the commodity, wherein the market states include market state attributes, and wherein the market state attributes include product- or service-based data, customer-based data, competitor-based data, seasonal variations, and special events;

an instruction for calculating a forecast of the market states for a next pricing period, wherein the forecast includes a forecast price for the commodity on the spot market during the next pricing period;

an instruction for generating a clustering index for each of the past transactions and each of the forecasted market states;

an instruction for comparing clustering indices of the past transactions and the forecasted market states for the next pricing period; and

an instruction for generating a price-demand curve for the commodity on the spot market for the next pricing period using records from the past transactions having clustering indices that are the same or comparable to the cluster index of the forecasted market states for the next pricing period.

11. (Currently amended) The computer readable medium of claim 10, wherein the forecast market state condition comprises at least one of a maximum price for the commodity, a minimum price for the commodity, a company's price rank, or the nearest higher price of the commodity.

12. (Cancelled).

13. (Currently amended) The computer readable medium of claim 10, wherein the instructions for generating is executed without using data from any other cluster.

14. (Cancelled).

15. (Currently amended) The computer readable medium of claim 10, wherein the code further comprises an instruction for determining a spot price for the commodity on the spot market for the next pricing period using the price-demand curve.

16. (Currently amended) The computer readable medium of claim 10, wherein the instruction for determining the spot price for the commodity comprises an instruction for determining the spot price consistent with maximizing profit, volume, or revenue.

17. (Currently amended) The computer readable medium of claim 10, wherein the commodity is a product.

18. (Currently amended) The computer readable medium of claim 10, wherein the commodity is a service.

19. (Currently amended) A system for determining a spot price for a commodity on a spot market, comprising:

a database comprising historical data for the commodity, wherein the historical data includes transactional data and non-transactional data, wherein the transactional data includes prices and quantities of the commodity and date sold in past transactions, wherein the non-transactional data includes non-transactional information or conditions that affect the spot price or demand of the commodity, wherein the market states include market state attributes, and wherein the market state attributes include product- or service-based data, customer-based data, competitor-based data, seasonal variations, and special events;

a processor comprising:

a market state generation module that is adapted to generate market states using the historical data and a forecast of the market states for a next pricing period;

a clustering module that is adapted to generate a clustering index for each of the past transactions and each of the forecasted market states;

a demand curve generation module that is adapted to generate a price-demand curve for the commodity on the spot market for the next pricing period using records from the past transactions having clustering indices that are the same or comparable to the cluster index of the forecasted market states for the next pricing period.

20. (Previously presented) The system of claim 19, further comprising a price determination module that is adapted to use a demand curve from the demand curve generation module and a business rule to determine the spot price for the commodity on the spot market for the next pricing period.

21. (Previously presented) The system of claim 19, wherein:
the market state comprises a prediction of the spot price for the commodity during the next pricing period; and
the records used by the demand curve generation module comprise the prediction of the spot price for the commodity.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: no prior art was found which anticipates or renders obvious calculating a spot price for a commodity on a spot market because spot prices of commodities tend to be very volatile and difficult to predict. Hence, the present invention determines a spot price for a commodity in a spot market by gauging the volatility of a commodity in respective market state using the price, quantity, and date of past transactions and incorporating seasonal variations and special events.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. ZECHER whose telephone number is (571)270-3032. The examiner can normally be reached on M-F 7:30-5:00 alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRZ

/Hani M. Kazimi/
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